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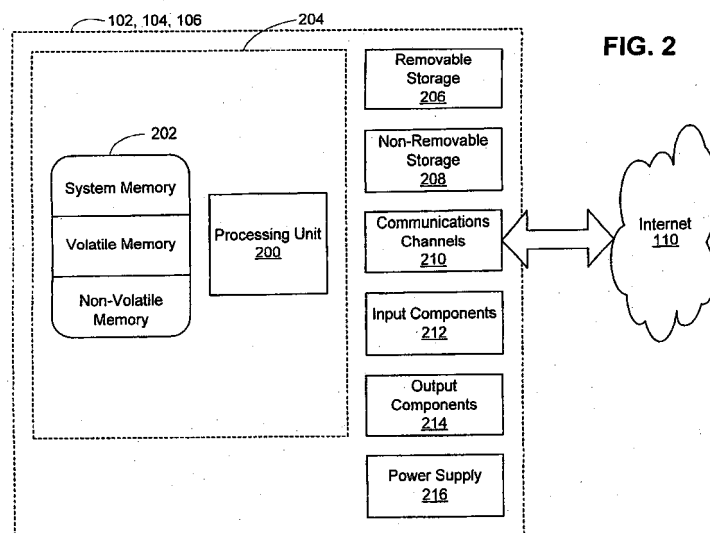
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(54) **Method and system for an atomically updated, central cache memory**

(57) Disclosed is a central cache that is updated without the overhead of locking. Updates are "atomic" in that they cannot be interrupted part way through. Applications are always free to read data in the cache, accessing the data through a reference table. Applications do not directly update the cache, instead, they send update requests to a service routine. To update the cache, the service routine proceeds in two phases. In the first phase,

the service routine prepares the new data and adds them to the cache, without updating the reference table. During the first phase, an application accessing the cache cannot "see" the new data because the reference table has not yet been updated. After the first phase is complete, the service routine performs the second phase of the update process: atomically updating the reference table. The two-phase update process leaves the cache, at all times, in a consistent state.





EUROPEAN SEARCH REPORT

Application Number
EP 08 01 5408

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 5 706 462 A (MATOUSEK JON FRANKLIN [US]) 6 January 1998 (1998-01-06) * column 6, lines 6-20; figure 5a * * column 3, lines 36-64 * * column 14, lines 16-34 * * column 15, lines 34-64 * * column 17, line 65 - column 18, lines 5-23 * * column 21, lines 35-43 * * column 19, line 59 - column 20, line 65 *	1-5	INV. G06F12/08 G06F17/30
Y A	EP 1 113 413 A (GE MED SYS GLOBAL TECH CO LLC [US]) 4 July 2001 (2001-07-04) * the whole document * * paragraphs [0002] - [0004], [0006], [0009] - [0019] *	3,4 1,2,5	
Y	KAREDLA R ET AL: "Caching strategies to improve disk system performance", COMPUTER, IEEE SERVICE CENTER, LOS ALAMITOS, CA, US, vol. 27, no. 3, 1 March 1994 (1994-03-01), pages 38-46, XP011416620, ISSN: 0018-9162, DOI: 10.1109/2.268884 * the whole document *	1-5	TECHNICAL FIELDS SEARCHED (IPC) G06F G06T G09G
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 28 February 2013	Examiner Breche, Philippe
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 08 01 5408

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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28-02-2013

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82